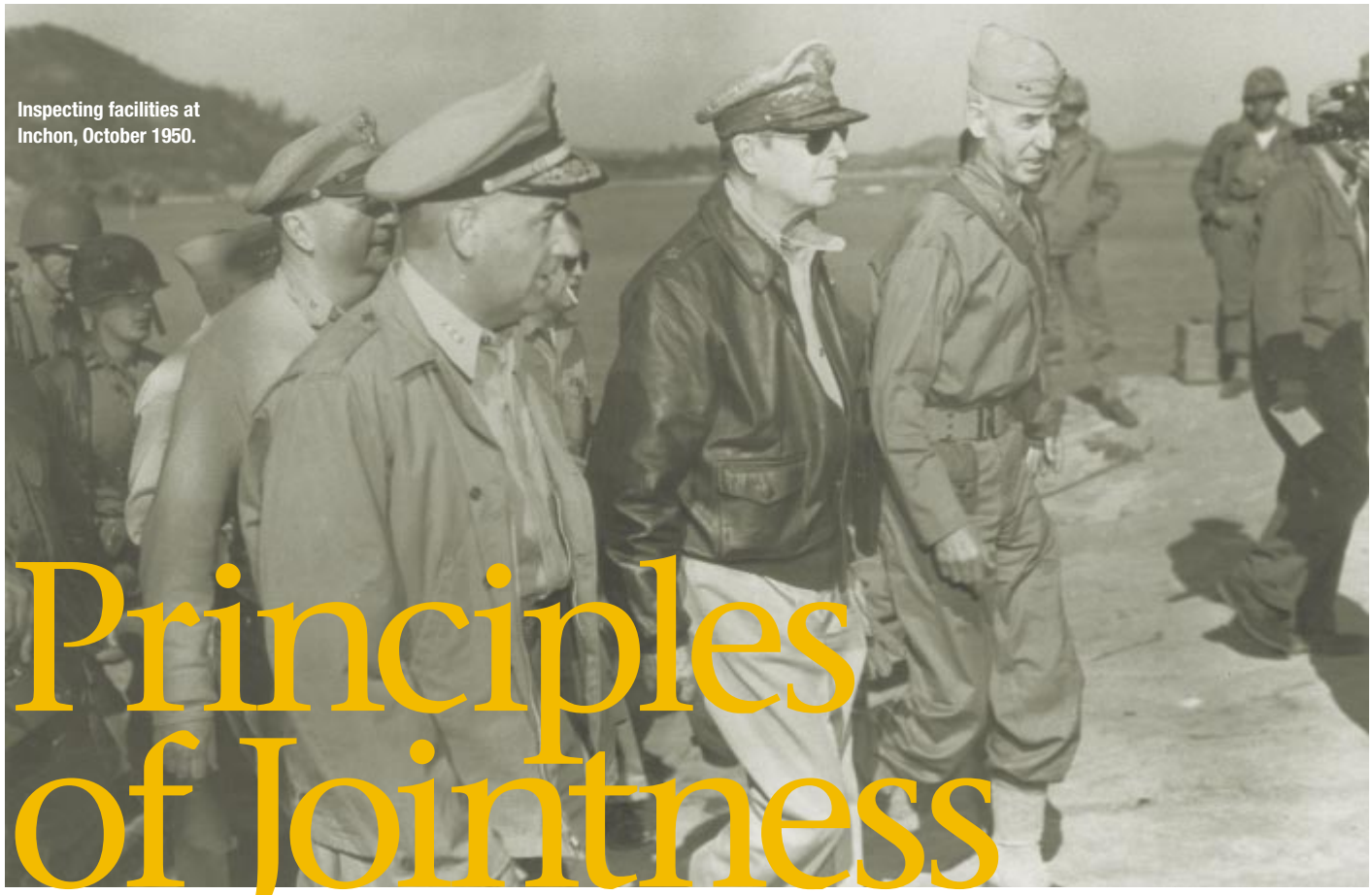

Inspecting facilities at Inchon, October 1950.

Naval Historical Center

Principles of Jointness

By ROBERT C. RUBEL

Despite all the attention given to jointness since World War II, there is no comprehensive theory that underpins the concept in doctrine. This is unusual in light of the large body of literature on operational art. Most military practitioners find operational art inherently joint, yet it has not been linked theoretically to jointness. Joint Publication 1, *Joint Warfare of the U.S. Armed Forces*, offers a list of joint principles, but these are mostly exhortations and fall short of constituting a theory.

The reason for this state of affairs is not hard to fathom. As one observer has put it:

In the course of research and analysis, I also gained a sense of why jointness has rarely been treated clinically. In peacetime, the bewildering maze of operational detail, legislation, doctrine, technology, personalities, factions and formal organizations has made jointness many things to many people. Since as a subset of war, jointness in combat lies in the realm of chaos, it is no more tractable to numerical reductionism, logical formats, or formulae than the arts, sculpture, or the weather. Like schools of thought in art, the intensity of partisanship on issues of jointness has sometimes approached the level of emotion held toward foes in war, for it touches closely on the critical bonding and cohesion that lie at the heart of military institutions, and their predisposition to see the world in "them-us" terms.[1]

In such a highly charged environment few people can be objective enough to develop theory.

An evaluation of the relevant literature reveals a fragmented approach to joint theory. There is a tendency to focus on theater warfighting or activities on the Pentagon level. This is unsurprising because the two environments are so

Captain Robert C. Rubel, USN, is deputy dean of the Center for Naval Warfare Studies at the Naval War College and served on *USS Eisenhower* during Desert Storm.

M–1 tank near Cernica, Kosovo.

55th Signal Company (William Montoya)

different. Joint principles are normally considered in terms of support of other activities. But when the literature attempts to address underlying factors, two principles emerge repeatedly, either explicitly or implicitly.

Merging services into unified organizations (such as joint force commands) can compensate for weaknesses in one service through the strengths of others—the principle of complementarity. For example, the Air Force can provide the Army more air defense than ground forces can provide for themselves. For the enemy to defend against one service it must become vulnerable to others; hence the dilemma. For example, to throw a mobile operational reserve against a ground thrust would require moving. This would make the reserve vulnerable to attack from the air and thus pose an unsolvable problem.

it would be better to have proactive jointness—the ability to achieve effective cooperation prior to a fight

Taken together, these principles define what synergy means in military terms. Combining elements of two or more services is more effective than simply tallying their respective numbers. Joint doctrine seems to be based on such principles, and Joint Pub 1 and Joint Pub 3, *Doctrine for Joint Operations*, prescribe synergy and presenting an enemy with dilemmas.

Although these principles represent the benefits of joint operations, they do not explain how jointness is achieved or how much is enough. In various ways many observers advocate the hierarchy principle, which holds that the degree of jointness (or cooperation among the services) is inversely proportionate to the number of command echelons. Flatter organizations are more prone to effective internal cooperation. This principle is embedded in doctrine in the form of the joint task force, which is the principal method of operational command and control in theater—despite its ad hoc nature—precisely because it makes operational organizations flatter.

A related principle, which can be termed the necessity principle, states that jointness tends to increase in the face of an enemy on the lower echelons of command. One analyst noted that "the supreme lesson of the Pacific War . . . [is] that true unity of command can be achieved only on the field of battle."[2] Conversely, the least jointness is exhibited in peacetime at the higher echelons.

There is nothing surprising about the necessity principle, but it raises a point that seems to reach the heart of the matter. Even though creative improvisation and willingness to put mission interests ahead of parochial interests when engaged in battle are laudable, they should not constitute policy. In other words, rather than waiting until forces are locked in combat, it would be better to have proactive jointness—the ability to achieve effective cooperation prior to a fight. But proactive jointness is an inherently top-down policy matter in peacetime and thus is inhibited by the hierarchy principle since all echelons from the Joint Staff on down get involved.

Striking a Balance

The literature also deals with the question of how much jointness is enough and how much is too much. Two ideas seem to be at work here. The first is the cohesion principle. Students of war almost universally state that joint arrangements which disrupt unit cohesion negate benefits by reducing morale and efficiency. The level on which jointness disrupts cohesion is usually thought to be the upper tactical level (division, battle group, wing, Marine expeditionary force). However, the necessity principle seems to indicate that lower levels have successfully integrated. The Cactus Air Force in the Solomons during World War II integrated squadrons from different services into a cohesive fighting group.

It is worthwhile distinguishing between synchronization and integration. There appears to be great advantage in having tactical units self-synchronize with units of other services. However, integration—attaching elements of one service to another—is fraught with hazards. First, logistics can

F–16s during exercise at Kunsan air base, Korea.

U.S. Air Force (Jerry Morrison)

become so cumbersome that formation efficiency is reduced despite the additive effects of the attached element. Second, depending on when units are attached, training (or lack thereof) will be similarly inhibiting. Thus the applicability of the cohesion principle seems situation dependent.

A second limiting factor is diversity. Some decry the potential for strategic monism if the services were truly unified; so the diversity principle states that competition of ideas leads to more stable strategy development. This idea has merit on several counts. First, history is replete with episodes in which a person or organization dominated national or theater strategy to the detriment of other interests. The United States is a pluralistic democracy, and its strategy must be discourse-based and represent the interests of all stakeholders. Second, if it was embodied in a general staff, jointness might lead to programming decisions that eventually painted the military into a strategic corner. Moreover, the sad history of the integration of the Canadian Forces which underwent true unification is universally cited as an example of too much of a good thing when it comes to overcoming parochialism.

Internecine strife among the services should not be tolerated. Congress, in the Goldwater-Nichols Act, underscored that competition could only be accommodated in the context of available resources and on certain levels of command. Between 1947 and 1986, the diversity and hierarchy principles combined, without the influence of necessity, to override the complimentarity principle. Congress finally supplied the necessity.

Cohesion seems to lose relevancy in ascending the chain of command while diversity loses relevancy in descent. CINCs and JTFs dwell in the middle where cohesion and diversity meet. A joint force commander can choose between two styles of command with regard to the principles: a coordinator who rationalizes the possibly competing plans of component commanders or an orchestrator who uses a staff to develop an operational plan and then issues unambiguous orders. General Norman Schwarzkopf, USA, appears to have been a coordinator during the Gulf War, leaving service components to develop their plans (in the context of a general strategy) and then taking the necessary minimum steps to deconflict them. By contrast, General Douglas MacArthur was an orchestrator. The Inchon landing was a detailed operational maneuver imposed on unwilling subordinate commands by his staff. A coordinator will maximize diversity and therefore unit cohesion while an orchestrator will minimize diversity and risk tactical cohesion in the interest of orchestration. The trick is knowing which command style is appropriate.

This can lead to the conclusion that the degree of desired jointness is situation dependent. Although these principles provide some general ideas on jointness, they do not offer clear guidance on which circumstances demand integration. But other principles, although speculative, are based on observed facts and trends.

Marines on range at Capo Teulada, Italy.

U.S. Marine Corps (Matthew D. Kell)

New Concepts

The preparation principle, a corollary to the necessity principle, asserts that the greater the expected necessity for speed of command in operations, the greater the required degree of proactive jointness. A fundamental tenet of *Joint Vision 2020* is that the future operational environment will require greater speed of command. This implies a need for self-synchronization of lower echelons and thus the services must invest in command, control, communications, computers, intelligence, surveillance, and reconnaissance interoperability down to unit level.

Networking of combat units has a profound effect on how the preparation, cohesion, and diversity principles apply to military operations. Networked units permit a swarming style of war in which commanders have substantial discretion in the constantly updated intent of JFCs. Sound doctrine is critical to such operations, so that dimension of preparation is central. But networking allows both creativity and changes of plans on the fly, so highly structured training is less useful. Because networked units are not as dependent on fixed formations for mutual support and more dependent on information sharing, the cohesion principle changes dramatically. There may be little need for formal attachments, and units collaborate based on emerging common operational pictures. Moreover, network-enabled swarming requires adherence to a basic rule set (doctrine) but permits and even demands considerable latitude in decisionmaking for local commanders, so the diversity principle will change.

Joint strategies and operational concepts that require tight orchestration should be subjected to centralized planning and control—the orchestration principle. There may be a time and place for diverse inputs on strategy, but once a decision is made diversity is an evil. Desert Storm illustrated this principle. The Marines were supposed to conduct a fixing attack in the center while VII Corps mounted a flanking attack to surround and annihilate the Republican Guard. Yet Schwarzkopf did not closely control the Marine rate of advance and their rapid attack forced the Iraqis into headlong retreat before the Army could close the trap.

JFCs must avoid situations that jeopardize success in one environment to evade risk in others

The triphibious principle (a term coined by Winston Churchill to fix the need to understand the combined action of land, sea, and air forces) is the inverse of the dilemma principle. It holds that JFCs must avoid situations that jeopardize success in one environment to evade risk in others. The land, sea, air, space, special operations, and information warfare environments are connected by this principle. A prime historical example was Guadalcanal, where Admiral Ernest King sent the Marines ashore before attaining adequate sea and air control.

The parallel strategies principle comes into play when risk is reduced by executing multiple simultaneous strategies (such as air combined with ground or maritime) only to the extent that their effects are additive and do not significantly attenuate their respective effects and execution.

Emergency response on *USS Dwight D. Eisenhower.*

U.S. Navy (Justin Thomas)

This is a combination of the complimentarity and dilemma principles writ large. Joint doctrine does not address this issue but leaves the door open for it, and it is a source of doctrinal friction between the Air Force and other services. The Marine Corps, for example, depending on its own aircraft for tactical fires, is loath to chop air assets to the joint force air component commander (JFACC) since losses in one air campaign may impede ensuing amphibious or ground maneuver operations. JFCs must have the authority, objectivity, and courage to decide on a principal operational strategy, but also the vision (based on education) to value the benefits and hazards of a multipronged strategy.

Two issues have been unaddressed by any principle so far. The first is micromanagement. Some contend that increasing connectivity and flatter organizations will lead to centralized control. There appears to be no governing principle in the literature or historical record. Abraham Lincoln tried to micromanage the Union Army with the telegraph and express riders while George Bush left his coalition commander in a guidance vacuum during cease-fire talks after Desert Storm despite the availability of satellite telephones and fax machines. The proper degree of management seems to be governed by personalities and is not amenable to simple rules.

The second unaddressed issue is deciding who should hold joint command. This issue is currently governed by the quasi-principle that a joint force commander should be from the service supplying the preponderant force. There is some sense to this, but it does not guarantee that the most fit person gains command. There is the concern that an officer from one service cannot be trusted to make strategic decisions concerning the core fighting capability of another service's main forces. The Navy, for example, refused to assign fast carriers to General MacArthur in World War II, assuming that an Army officer could not make competent decisions about risking those assets. Most recently, the Army assigned a three-star general to command a relatively small helicopter detachment in Albania to ensure that the Air Force JFACC would not misuse the aircraft.

The answer to these problems is not found in principles or rules of thumb. Rather it seems to reside in nurturing joint institutions. U.S. Joint Forces Command, as the joint force trainer and integrator, and the National Defense University should be centers of excellence that develop joint operational theory and doctrine. This system would refine joint education and training to the point that all officers eligible for joint command would be adequately prepared and the preponderance of forces policy would suffice. Conversely, if joint officer development was sophisticated, capabilities and personality could decide the joint commander, not uniform color. In such an environment, where higher echelons had great confidence in local commanders, counterproductive micromanagement would be less likely.

Theory provides a common vocabulary for debating complex issues. This may not resolve every argument, but it enables parties in a debate to understand their differences. Moreover, theory begets theory. The first step toward a clinical examination of jointness will stimulate further work. Progressive theoretical work might help prevent reinventing the wheel by successive generations of officers. Cyclic attempts to promote jointness reflected in part by the necessity principle would be disrupted and progress would ensue. **JFQ**

NOTES

[1] Roger A. Beaumont, *Joint Military Operations: A Short History* (Westport, Conn.: Greenwood Press, 1993), p. xv.

[2] Louis Morton, "Pacific Command: A Study in Interservice Relations," *The Harmon Memorial Lectures in Military History, 1957–1987* (Washington: Office of Air Force History, 1988), p. 152.